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July 15, 2008

VIA ELECTRONIC FILING

Marlene H. Dortch Secretary Federal Communications Commission 445 12th Street, SW Washington, D.C. 20554

Re: Written Ex Parte Presentation, CS Docket No. 97-80

Dear Ms. Dortch:

On January 10, 2007, the Commission issued a Public Notice acknowledging that Beyond Broadband Technology, LLC (BBT) had developed "a downloadable security solution which provides for common reliance" and, thus, was compliant with the Commission's rules barring integrated set-top devices. While the Media Bureau later requested, and BBT provided, additional information regarding the BBT open standard downloadable security (OSDS) solution in connection with a deferral petition filed by JetBroadband LLC, the Commission has never disavowed or otherwise retreated from the conclusion reached in the Public Notice and, indeed, has continued to refer to that Public Notice favorably.

¹ Public Notice, Commission Reiterates that Downloadable Security Technology Satisfies the Commission's Rules on Set-top Boxes and Notes Beyond Broadband Technology's Development of Downloadable Security Solution, DA 07-51 (Jan. 10, 2007). See also Comcast Corporation Request for Waiver of Section 76.1204(a)(1) of the Commission's Rules Implementation of Section 304 of the Telecommunications Act of 1996 Commercial Availability of Navigation Devices, Memorandum Opinion and Order, 22 FCC Rcd 228 (MB, Jan. 10, 2007) at para. 34.

² Letter from Monica Desai, Chief, Media Bureau, to Nicole Paolini-Subramanya, Counsel to JetBroadband, FCC, CSR-7131-Z, DA 07-3320, (rel. July 23, 2007); Letter from Nicole Paolini-Subramanya, Counsel to JetBroadband to Monica Desai, CSR -7181-Z, dated Aug. 7, 2007 (attaching letter from William D. Bauer, CEO, BBT to Ms. Paolini-Subramanya).

³ See Comcast Corporation, Memorandum Opinion and Order, 22 FCC Rcd 17113 (Sept. 4, 2007) at para. 4 and note 20. See also Armstrong Utilities, et al., Memorandum Opinion and Order, 22 FCC Rcd 11725 (MB, June 29, 2007) at para. 52 and notes 179-180 (citing BBT's April 26, 2007 response to the CEA's opposition to JetBroadband's deferral waiver).

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Nevertheless, in a recent series of meetings with Commission staff (and in public statements reported in the press), representatives of the Consumer Electronics Association (CEA) have attempted to cast doubt on the status of the BBT OSDS solution under the Commission's rules and, in particular, on whether an operator deploying BBT's OSDS solution without a waiver would be subject to an enforcement action by the Commission. In waging this anti-BBT campaign, the CEA has gone so far as to suggest that BBT has not provided the Commission with a "full and accurate description" of its OSDS technology.⁴

In fact, however, it is the CEA, not BBT, that has misrepresented the BBT OSDS technology to the Commission. Although BBT has previously extended invitations to the CEA to meet and discuss the details of this new technology, and the terms under which its deployment would be licensed, the CEA regrettably has spurned the offer. Instead, the CEA has opted to repeatedly file letters mischaracterizing the BBT downloadable security solution, thereby fostering confusion and uncertainty at the Commission and among cable operators and equipment manufacturers and contributing to delays in the deployment of this new technology.

The purpose of this letter is to set the record straight on the many misunderstandings the CEA appears to have regarding the BBT OSDS. We wish to emphasize that there is no need for any further Commission action regarding the BBT OSDS and BBT is not seeking any further action. BBT does take this occasion to once again extend an invitation to the CEA and any of its members to meet with BBT to learn about our OSDS technology. Several manufacturers have already done so and we are working with them to bring this technology to market. Hopefully the CEA will join in that effort to develop a new technology that will benefit consumers, the consumer electronics industry and video distributors.

The BBTSolution™, as we call the OSDS technology we have designed and which has already been fabricated on a secure microchip, is a next-generation separable security solution that allows video distributors to use any one of multiple "downloadable conditional access" systems. The OSDS system creates a secure communications path in which these downloadable conditional access systems can operate. The creation of the secure communications path, via the BBTSolution™ microchip (whether it is in a cable set-top box, a television set, a satellite box, a DVR, a computer or any other CE device) takes place prior to the operation of any downloadable conditional access system.

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⁴ See Letter from Robert S. Schwartz, Counsel to the CEA, to Marlene H. Dortch, Secretary, Federal Communications Commission, CS Docket No. 79-80 (June 20, 2008). The CEA, in statements to the press, also has called into question the June 5, 2008 ex parte notice submitted by BBT with respect to its June 4, 2008 meeting with Chairman Martin, implying that BBT's ex parte notice should not have reported statements made during that meeting by the Chairman in response to information provided to him by BBT. "CEA Questions BBT Conditional Access Again," Communications Daily, June 23, 2008 at page 6. BBT submits that fully disclosing the substance of meetings with the Commission is consistent with both the spirit and the letter of the ex parte rules.

⁵ See Letter from Seth Davidson, Counsel to BBT, to Marlene H. Dortch, Secretary, Federal Communications Commission, filed in CS Docket No. 97-80, (June 4, 2008).

Once the secure communications path is established, the BBT microchip essentially provides conditional access vendors a "tool box" of standard, well established encryption algorithms in a cryptographic library which can be used in any configuration by any conditional access system that makes use of the licensed specifications. Of critical significance is the fact that the BBT OSDS solution is being designed to be "open": any vendor can obtain a non-restrictive license and will be provided with the specifications that will allow them to design a downloadable version of their conditional access systems compatible with the BBTSolutionTM secure micro. The cost of the secure micro, including full license rights, will be \$5.00 – one-seventh the cost of the embedded hardware/license for a CableCARD interface.

Moreover, while BBT has designed its own conditional access system that can be used with the BBTSolution TM secure micro with no additional fee, there is no requirement that anyone use that particular conditional access system and, indeed, neither the BBT conditional access system nor any other conditional access system is pre-loaded on the BBT secure micro. As such, consistent with the Commission's rules, the BBTSolution TM is truly a "separable" security approach.

It is important to emphasize the following: <u>BBT is not an equipment manufacturer</u>. BBT has no intention of building its own consumer electronics equipment, be they cable set top boxes, IPTV boxes, DBS boxes, television sets, or anything else. Unlike other proposals for "downloadable conditional access," there is no linkage between the use of the secure micro and any specific consumer electronics equipment. Any device manufacturer in this open environment can license and use the BBT secure micro, and any secure microchip manufacturer can get a license to make such a chip. Also, as noted above, there is no linkage between the BBT *Solution* TM secure microchip and any particular conditional access system. Specifications will be made available so any vendor can create and sell, and any video provider can use, any conditional access system that is designed to be compatible with the licensed specifications.

With the above description of the BBTSolution TM in mind, we now turn to the various misstatements and mischaracterizations of fact and law that have been bandied about by those who have chosen to go to the Commission without first making an effort to talk to BBT:

 Misstatement No. 1 – The Commission is still considering a request by JetBroadband for a "waiver" to allow it to use BBTSolution™-enabled set-top boxes. (CEA ex parte, June 20, 2008)

Not so. The petition to which the CEA refers, filed by JetBroadband LLC on February 14, 2007, did <u>not</u> seek the Commission's consent or a waiver to deploy BBTSolutionTM set top boxes. Rather, as is clear on the face of its petition, JetBroadband merely sought

⁶ BBT's conditional access system, called "BBT Heavy," can accommodate any type of tier or VOD marketing being done today. It can even provide single-channel access on a device-by-device basis in the home. We stress, however, that there is no requirement to use the BBT conditional access system with the BBT OSDS. Any conditional access developer can design a downloadable version of their conditional access product that can work with the BBT *Solution* TM.

permission to use Motorola integrated set-tops until such time as it could obtain and deploy BBTSolution™-enabled boxes − boxes that the Commission had, in its January 10, 2007 Public Notice, said were compliant with the integration ban. This deferral request was no different than deferral requests filed by other operators seeking permission to continue to use integrated boxes until they could obtain compliant boxes.

 Misstatement No. 2 – BBT's OSDS is designed only for small, one-way cable systems. (CEA ex parte, April 24, 2008)

This is totally incorrect. The BBT OSDS solution was designed so that it can work not only with one-way MVPD systems (which include, inter alia, many systems run by small operators and all DBS systems) but also with two-way systems. For instance, the BBTSolution $^{\text{TM}}$ can be fully compatible with devices employing tru2way technology. Similarly, two-way boxes with DVRs, like Tivo, could also be compatible. The BBT OSDS solution does not constrain the design of any middleware. It is up to the manufacturer of the set-top box or other consumer device to determine the capabilities of that particular device.

 Misstatement No. 3 – The BBTSolution[™], like a number of other proposed downloadable security technologies, cannot be deployed without a waiver because it is "proprietary" in nature and must be "embedded" in consumer devices. (CEA ex parte, June 20, 2008).

According to the CEA, a downloadable security solution that is "proprietary" and that is embedded in consumer devices cannot be compliant with the ban on integrated set-top boxes. The CEA backs up this assertion by referring to requests from some MVPDs for waivers to use downloadable security systems that purportedly are "similar to" BBT's OSDS solution. The CEA is mistaken in its understanding of both the law and the facts.

First, if by "proprietary," the CEA means that a license is needed before the BBTSolution can be deployed, then the BBTSolution is indeed "proprietary." Of course, by that definition, CableCARD technology also is proprietary, since manufacturers seeking to build CableCARD-enabled devices need a license to do so. Presumably, the CEA does not believe the fact that a security solution is subject to licensing renders it non-compliant with the Commission's rules. Similarly, the fact that the BBT chip can be embedded in a wide array of consumer devices (as well as in a CableCard itself) hardly can disqualify the BBTSolution from being compliant with the integrated set-top ban since the CableCARD interface itself is a piece of embedded hardware. In short, the CEA's claim that BBT's OSDS solution cannot be compliant with the integration ban because it requires a license and involves a piece of hardware (i.e., the secure micro) is pure sophistry.

⁷ Indeed, Motorola filed comments urging the grant of JetBroadband's deferral petition on the grounds that "the Commission has previously indicated that the BBT downloadable security solution is an acceptable way of complying with the integration ban." Comments of Motorola, Inc., CSR 7131-Z (filed April 2, 2007) at page 3.

Second, while there have been filings seeking to qualify other "downloadable conditional access" technologies – including letters from Motorola, Widevine, etc. – the CEA's contention that these technologies are "similar" to the BBT solution overlooks a significant distinction between BBT's approach and these other technologies. As discussed above, to date, all of these other technologies differ from BBT's solution precisely because, as described, they are specifically conditional access systems that can be downloaded. In contrast, BBT's OSDS solution, like the CableCARD interface, is not, itself, a conditional access system. Rather, it is an open and interoperable – and thus Section 1204-compliant – communications path security solution without any specific "conditional access system" pre-loaded. The BBT OSDS can work with multiple forms of downloadable conditional access, potentially including variants of all the alternatives the CEA has cited.

Misstatement No. 4 – The BBT Solution ™ would "lock out" CableCARD devices. (CEA ex parte, June 20, 2008).

Wrong. The BBTSolution $^{\text{TM}}$ secure micro can easily be incorporated into a CableCARD and BBT has every intention of taking the steps necessary to ensure the availability of such BBT-enabled CableCARDS so that anyone who purchases a CableCARD device can use that device with any MVPD using the BBT OSDS. As discussed above, what seems to concern the CEA is that the BBT secure micro also can be "embedded" directly in the devices that consumers use to receive MVPD service, just as the CableCARD interface slot is similarly "embedded."

The CEA's concern in this regard is rather puzzling. The Commission's goal – and the goal of Congress – was for consumers to have the option of purchasing devices with separable security at retail, not to force all such devices to have separable security. Thus, the CEA's members are not required to include the CableCARD interface in all devices that they sell to consumers and, in fact, most such devices sold at retail do not have a CableCARD interface. The BBTSolution TM does not change this equation. Going forward, manufacturers could continue to build television sets or other devices in a variety of configurations: devices with no security hardware (in which case purchasers would have to obtain a separate set-top); devices with CableCARD slots (which, with the use of a BBT-enabled CableCARD, would be compatible with MVPDs deploying the BBTSolution TM); or sets without the CableCARD interface, but with the BBT secure micro.

Misstatement No. 5 – BBT's licensing terms are not "open." (CEA ex parte, June 20, 2008).

Incorrect. BBT has been willing, since the beginning of this process, to sit down with the CEA and discuss the terms of the BBTSolution $^{\text{TM}}$ license. But the CEA has been unwilling to do so. We have repeatedly said that we are modeling our entire effort after the successful DOCSIS modem rollout, which has resulted in multiple manufacturers making modems available on retail shelves and a steady decline in the consumer price of

such products. The initial OSDS BBTSolution™ chip has now been successfully manufactured. The cost of the chip, including full license rights, will be \$5.00. By way of comparison, just the hardware for accepting a CableCARD (the "embedded" interface slot and associated electronics) including the required license, has a wholesale cost of over \$35.00 to some CE manufacturers. The cost of the card itself is even higher.

We have described the BBTSolution TM OSDS as a "next generation" technology because it can fully take the place of the physical CableCARD design (both the "embedded" interface and the card) and be more secure, more versatile, and less expensive for the manufacturer and the consumer. At the same time, as noted above, it is "backward compatible" with the CableCARD specification, so that should manufacturers prefer to build and consumers prefer to purchase that older design, they can. In short, there is absolutely no merit to suggestions that the planned BBTSolution TM licensing terms are unreasonable or restrictive.

• Misstatement No. 6 – The BBT Solution ™ technology cannot be compliant with the integration ban because it is not nationally portable and does not satisfy the "common reliance" rule. (CEA ex parte, June 20, 2008).

Ultimately, two arguments rest at the heart of the CEA's assertion that BBT's OSDS solution is non-compliant with the integration ban: that the BBTSolution $^{\text{TM}}$ is not nationally portable and that it does not comply with the "rule" requiring "common reliance." However, the CEA has imbued these two concepts with meanings that the Commission has not ascribed to them and that, indeed, are in conflict with what the Commission has clearly stated regarding the deployment of innovative new security solutions.

With respect to the issue of national portability, the CEA has argued that to be compliant with the set-top integration ban, a device must "be portable among MVPD systems." However, this is not and never has been the case. Cable, DBS, and telco-IPTV video services all are MVPDs, but a consumer who purchases a CableCARD-enabled television set will still need to lease or buy a set-top box to use with that set if he or she subscribes to DBS (or to most IPTV systems). Moreover, the vast majority of the sets that the consumer electronics industry makes and sells do not even contain a CableCARD slot and thus consumers purchasing such sets would still have to buy an additional box, or lease a box from their video service provider. If CE manufacturers include the BBT secure micro in some of their sets, and a customer purchases that set and their choice of video provider does not have a BBT-enabled system, that consumer is in exactly the same

⁸ In this regard, we note that for those operators that choose to use the BBT Heavy conditional access system – and we emphasize again that use of that particular conditional access system is not required nor is it built into the BBT*Solution*™ secure micro – the associated headend controller costs less than \$5000, as opposed to hundreds of thousands of dollars for some current proprietary conditional access systems.

⁹ Comments of the Consumer Electronics Association on NTS Communications, Inc.'s Petition for Extension of Waiver of Section 76.1204(a)(1), CS Docket No.97-80, CSR-7915-Z (filed June 23, 2008).

position as a consumer would be today if he or she bought a set without any built-in security technology or bought a CableCARD-enabled box and subscribed to DBS (which could be their only option in some rural areas of the country) or, in most instances, to IPTV.

As for "common reliance," the CEA's position is, in essence, that the Commission has mandated that there be a "single national standard" for compliant separable security. However, the Commission's common reliance policy was adopted as a means to an end, not as an end unto itself. The Commission's objective was to create an environment in which cable operator support for a particular separable security system was sufficient to ensure that manufacturers would be willing to offer, and consumers would be willing to purchase, retail devices using that technology. Cable operators have lived up to their end of the bargain – in less than a year's time, over 6 million CableCARD-enabled devices have been deployed by cable operators. It is noteworthy that under the terms of the recent tru2way Memorandum of Understanding, publicly lauded by CEA, "common reliance" requires only that 20 percent of the interactive devices deployed by cable operators contain the tru2way middleware and that requirement sunsets when ten million such devices have been deployed. In other words, even the CEA now acknowledges that "common reliance" does not require that there be universal and permanent reliance on one particular technology.

The CEA's interpretation of the Commission's rules would freeze technology – nothing could supplant the CableCARD unless 100 percent of all operators agreed in advance to deploy it and equipment manufacturers agreed to support it as well. That is not how markets work and it is not what the Commission has mandated. Congress expressly cautioned that the Commission "must avoid actions which could have the effect of freezing or chilling the development of new technologies or services." To that end, the Commission has disavowed any intent to "fix[] into law the current state of technology" or to "force cable operators to develop and deploy new products and services in tandem with consumer electronics manufacturers." Indeed, the Commission, in granting waivers giving IPTV providers additional time to develop a separable security solution that "will allow for interoperability between their systems and consumer electronics equipment," expressed its clear preference for "a downloadable solution based on open standards."

¹⁰ S. Rep. No. 104-230 at 181 (1996).

 $^{^{11}}$ Implementation of Section 304 of the Telecommunications Act of 1996, Second Report and Order, 20 FCC Rcd. 6794 (2005) at \P 35.

¹² Id. at ¶ 30.

¹³ See, e.g., Colo Telephone Company, et al., 22 FCC Rcd 13428 (MB, 2007) (at ¶ 15); Consolidated Requests for Waiver of Section 76.1204(a)(1) of the Commission's Rules, 23 FCC Rcd 4465 (MB, 2008) at note 4 (same).

The law does not mandate the inclusion of CableCARD slots into retail equipment and BBT is not seeking a requirement that all such devices contain our secure micro. We simply want the opportunity to roll out this new separable security technology on an open standard basis so that it has the opportunity to become a widely accepted interface. It is entirely up to the consumer equipment manufacturers to decide whether or not to build it into their retail devices, just as it is entirely up to them to decide whether or not to include CableCARD functionality in their devices. 14

CONCLUSION

To sum up, BBT has developed and is seeking to bring to market an innovative, next-generation open standard downloadable separable security system that can eventually provide an alternative to CableCARD technology. The BBT*Solution*TM:

- is highly secure, can be used by any equipment manufacturer and can be built into virtually any communication device;
- is not wedded to or bundled with a specific conditional access system and, indeed, can be interoperable with a wide variety of conditional access systems at the discretion of the conditional access system vendors;
- o can work with systems of any size and with one-way systems as well as two-way systems (and can be compatible with tru2way in particular);
- o costs a fraction of the CableCARD interface; and
- o is backwards compatible with CableCARD-enabled equipment.

The CEA, however, contends that the Commission's rules do not permit BBT's OSDS solution to be included in any equipment leased by cable operators to their customers unless that equipment also includes a costly CableCARD interface – an interface that neither the public nor the CEA's own members have embraced (and that the CEA's members are not required to include in retail equipment). The CEA's approach would freeze technology in its tracks.

The CEA presumably has reasons for adopting such an anti-consumer, anti-innovation interpretation of the Commission's rules – an interpretation designed to protect a technology that its own members have not embraced. The Commission, however, has recognized that its rules do not establish the CableCARD as the final word on separable security. While the Commission's rules do not guarantee the success of any particular separable security, neither do they impose impossible obstacles to such success. In any event, as noted at the outset, there is no

¹⁴ BBT notes that the CableCARD is a derivative design modeled after the computer port known as the "PCMCIA" Card (Personal Computer Memory Card International Association). It was formally introduced in 1991. It is no longer hosted in most new computers. Computer manufacturers found it to be neither reliable nor economical and, as noted above, it has not been widely embraced by the manufacturers of retail consumer navigation devices.

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need for the Commission to take any further action to validate the BBT open standard downloadable separable security solution and no such action is requested here.

If the BBTSolutionTM, which is less expensive and more flexible than the CableCARD, becomes accepted and widely used, it could eventually replace the CableCARD. However, if that does not happen, then the CableCARD will continue to be offered until some other new and improved separable security technology proves itself in the marketplace. But the CEA's vision of the CableCARD as the exclusive, permanent technological design for separable security is not the law and, indeed, is contrary to Congressional intent and the Commission's own repeated statements encouraging the deployment of a downloadable security solution based on open standards.

A copy of this letter is being filed as a written ex parte presentation in CS Docket No. 97-80. If there are any questions regarding this matter, please do not hesitate to contact either the undersigned.

Sincerely,

Seth A. Davidson

Counsel to Beyond Broadband Technology, LLC

cc: Chairman Kevin J. Martin

Commissioner Michael J. Copps

Commissioner Jonathan S. Adelstein

Commissioner Deborah Taylor Tate

Commissioner Robert M. McDowell

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